

REMARKS

Applicants request favorable reconsideration and withdrawal of the rejections set forth in the above-mentioned Office Action in view of the foregoing amendments and the following remarks.

Initially, Applicants note that the specification of the application has been amended herein to correct a typographical error in the citation to JP 8-22608 B. An Information Disclosure Statement (IDS) is being filed concurrently herewith also citing JP 8-22608 B.

Claims 1 and 3-6 remain pending in this application, with claim 1 being the only independent claim. Claim 2 has been cancelled without prejudice or disclaimer of subject matter. Claims 1 and 3 have been amended. Support for the amendments to the claims can be found throughout the originally-filed disclosure, including, for example, in the originally-filed claims, and at page 15, lines 2-9, as well as page 21, line 32 through page 22, line 30 of the specification. Accordingly, Applicants submit the amendments include no new matter.

Claims 1, 2, and 6 are rejected in the Office Action under 35 U.S.C. § 103 as being unpatentable over Malhotra et al. (U.S. Patent No. 6,444,294) in view of Tsuchida et al. (Japanese Laid-Open Patent Application No. 2002-103807). Claims 3-5 are rejected under 35 U.S.C. § 103 over Malhotra et al. in view of Tsuchida et al., and further in view of Kitamura et al. (U.S. Patent Application Pub. No. 2001/0016249).

Applicants respectfully traverse the rejections. Nevertheless, without conceding the propriety of the rejections and solely to expedite prosecution, independent claim 1 has been

amended to even further clarify the distinctions between the claimed invention and the cited references. Applicants submit independent claim 1 is patentably distinguishable from the cited references for at least the following reasons.

The Office Action cites Malhotra et al. as disclosing a recording medium comprising, inter alia, a lightfastness-imparting agent, an ink spreading/ink wetting agent which can be  $\alpha$ -tocopherol acetate or plain Vitamin E, and a filler that comprises inorganic pigments.

The Office Action acknowledges that Malhotra et al. does not disclose thiodipropionic acid or a salt thereof as the lightfastness-imparting agent, but finds that Tsuchida et al. discloses an inkjet recording medium that uses thiodipropionic acid as a lightfastness-imparting agent. The Office Action concludes, that it would have been obvious to one of ordinary skill in the art to substitute lightfastness-imparting agent of Tsuchida et al. for the lightfastness-imparting agent in the recording medium of Malhotra et al.

With respect to previously pending claim 2, the Office Action asserts Malhotra et al. discloses the weight percent of the ink spreading/ink wetting agent at col. 18, lines 47-55, the lightfastness-imparting agent at col 20, line 61 through col. 61, line 2, and the pigment at col. 23, line 65 through col. 24, line 5, such that the ink spreading/ink wetting agent and lightfastness-imparting agent are present from 1 to 20 weight percent based on the inorganic-pigment (filler).

Applicants submit, however, that the combination of Malhotra et al. and Tsuchida et al. does not suggest a recording medium comprising thiodipropionic acid or a salt thereof and

tocopherol or a derivative thereof added in a total proportion of 1 to less than 10 weight percent based on a inorganic pigment, as recited in amended independent claim 1.

Initially, Applicants note that as the primary citation to Malhotra et al. does not expressly disclose a thioldipropionic acid or a salt thereof (as acknowledged in the Office Action), it cannot be certain from the disclosure of the reference itself at what weight percentage a thioldipropionic acid or a salt thereof would be included with the coating, assuming, arguendo, that one of ordinary skill in the art were to modify the disclosure of Malhotra et al. in the manner set forth in the Office Action. Moreover, the secondary citation to Tsuchida et al., asserted as disclosing a lightfastness-imparting agent including thioldipropionic acid or a salt thereof in the Office Action, does not disclose weight percents for the thioldipropionic acid or a salt, or further disclose weight percentages of a tocopherol ink spreading agent and a pigment. Thus, Tsuchida et al. cannot be taken to disclose any specific weight percentage relation between these components.

Even if the coating disclosed of Malhotra et al. was modified to include a thioldipropionic acid or a salt thereof at the weight percentages disclosed in the reference for the lightfastness-imparting agent, or, alternatively, at the weight percentages for certain components of the lightfastness-imparting agent, the combination of references would still not suggest the claimed weight percentage relation recited in amended independent claim 1. As noted in the Office Action, Malhotra et al. discloses at col. 20, line 61 to col. 21, line 2, the lightfastness agent to range from 1 to 12 percent by weight of the coating. As further noted in the Office

Action, Malhotra et al. discloses at col. 18, lines 47-55, the ink spreading/ink wetting agent to range from 2 to 45 percent by weight of the coating, and at col. 23, line 65 through col. 24, line 5, the filler to range from 1 to 25 percent by weight of the coating. Thus, Malhotra et al. discloses the lightfastness agent and the ink spreading/ink wetting agent to be added relative to the filler in a range from 12 weight percent (1 weight percent lightfastness agent plus 2 weight percent ink spreading agent to 25 weight percent filler) to 5,700 weight percent (12 weight percent lightfastness agent plus 45 weight percent ink spreading agent to 1 weight percent filler). Such a range is outside the range recited in amended independent claim 1.

Examining the Malhotra et al. reference more closely, if one of ordinary skill in the art were to modify the coating disclosed in the reference so as to use thioldipropionic acid in place only of certain components of the lightfastness-imparting agent, the thioldipropionic acid would apparently be substituted for the antioxidant, or the antioxidant and antiozonant components of the lightfastness-imparting agent. Even if one of ordinary skill in the art were to make such modifications while maintaining the relative proportions disclosed in the reference, however, Applicants submit that the modified coating would still not include the claimed weight percentage relation recited in independent claim 1. Malhotra et al. discloses the antioxidant compound to be present in amounts from 0.5 to 4 weight percent of the coating. Malhotra et al., col. 23, lines 50-53. Alternatively, Malhotra et al. discloses the combination of antioxidant and antiozonant compounds to be present in amounts ranging from 0.5 to 6 weight percent. Malhotra et al., col. 23, lines 59-63. Thus, Malhotra et al. discloses the antioxidant and antiozonant

components to be added relative to the filler in a range from 10 weight percent (either 0.5 weight percent antioxidant plus 2 weight percent ink spreading agent, or 0.25 weight percent antioxidant plus 0.25 weight percent antiozonant plus 2 weight percent ink spreading agent, to 25 weight percent filler) to either 5,100 weight percent (3 weight percent antioxidant plus 3 weight percent antiozonant plus 45 weight percent ink spreading agent to 1 weight percent filler) or 5,300 weight percent (8 weight percent antioxidant plus 45 weight percent ink spreading agent to 1 weight percent filler). Thus, even if the coating of Malhotra et al. were modified so that thiodipropionic acid was substituted for components of the lightfastness-imparting agents, the modified coating would still not be as such that the thiodipropionic acid or salt thereof and the tocopherol or derivative thereof are in a total proportion of 1 to less than 10 weight percent based on the inorganic pigment, as recited in amended independent claim 1.

Applicants further submit that the references provide no other reason or suggestion to further modify the coating of Malhotra et al. so as to read on the range recited in independent claim 1. For example, there is no teaching in Malhotra et al. which would lead one of ordinary skill in the art to adjust the proportions of the lightfastness-imparting agent (including thiodipropionic acid), the ink spreading/ink wetting agent, and the pigment, as would apparently be necessary to somehow derive Applicants' claimed range.

For at least the foregoing reasons, Applicants submit that claim 1 is patentably distinguishable over the citations of record. Reconsideration and withdrawal of the Section 103 rejections are respectfully requested.

Dependent Claims 3-6 are also allowable, in their own right, for defining features of the present invention in addition to those recited in independent claim 1. Individual consideration of the dependent claims is requested.

Applicants submit that the present application is in condition for allowance. Favorable reconsideration, withdrawal of the rejections set forth in the above-noted Office Action, and an early Notice of Allowability are requested.

Applicants' undersigned attorney may be reached in our Washington, D.C. office by telephone at (202) 530-1010. All correspondence should continue to be directed to our below-listed address.

Respectfully submitted,

/Donald H. Heckenberg, Jr./

---

Donald H. Heckenberg, Jr.  
Attorney for Applicants  
Registration No. 60,081

FITZPATRICK, CELLA, HARPER & SCINTO  
30 Rockefeller Plaza  
New York, New York 10112-3801  
Facsimile: (212) 218-2200